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10/005,113	12/05/2001	Sandra Lynn Carrico	2001-0450	9439

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EXAMINER

CERVETTI, DAVID GARCIA

ART UNIT PAPER NUMBER

2136

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/005,113

Applicant(s)

CARRICO ET AL.

Examiner

David G. Cervetti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 32 (page 7, line 13). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The abstract of the disclosure is objected to because it exceeds 150 words in length. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The

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form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The disclosure is objected to because of the following informalities: "PPTP" (page 2, line 2), "CMOS" (page 6, line 11), "PIN" (page 6, line 29). While well known in the art, these terms have not been defined.

Claim Objections

Claim 6 is objected to because of the following informalities: "CMOS" (line 2 of the claim). While well known in the art this term has not been defined.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the apparatus according to claim 1" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeTreville and further in view of Schneier et al. and Fielder et al.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeTreville, Schneier et al., and Fielder et al. as applied to claim 4 above, and further in view of Borza.

Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeTreville and further in view of Fielder et al.

Regarding claim 1, DeTreville teaches a security mechanism for enabling a user to commence a session between a network peripheral device and a network (column 4, lines 18-22), comprising: an immutable memory element that contains first information including application software that initiates that provides security services (column 4, lines 35-40); a persistent memory element that contains second information to enable the security mechanism to configure the network peripheral device to different networks (column 5, lines 15-20); a volatile memory element that contains third information, including the critical data for authentication, said third information erased from the volatile memory at the

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completion of each connection session (column 5, lines 18-24). However, DeTreville does not disclose expressly a security mechanism for enabling a user to commence a session between a network peripheral device and a network, comprising: a tamper-evident enclosure for enclosing the memory elements.

Schneier et al. teach a security mechanism for enabling a user to commence a session between a network peripheral device and a network, comprising: a tamper-evident enclosure for enclosing the memory elements (column 8, lines 15-27).

Fielder et al. teach a security mechanism for enabling a user to commence a session between a network peripheral device and a network, comprising: a volatile memory element that contains third information, including the critical data for authentication, said third information erased from the volatile memory at the completion of each connection session (column 4, lines 59-67, column 5, lines 1-4).

DeTreville, Schneier et al., and Fielder et al. are analogous art because they are directed to a similar problem solving area – authentication systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to: house memory components in a tamper evident enclosure to reveal any attempt to physically open the structure, and to store critical data for authentication on volatile memory to avoid misappropriation.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Schneier et al. and Fielder et al. with the method

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of DeTreville for the benefit of authentication systems to obtain the invention as specified in claim 1.

Regarding claim 2, DeTreville, Schneier et al., and Fielder et al. teach the limitations as set forth under claim 1 above. Furthermore, DeTreville teaches the apparatus according to claim 1 wherein the security services include authentication of the security mechanism itself (column 4, lines 35-38) and authentication of the user to the network upon receipt of identification information from the security mechanism and the user (column 23, lines 4-14), respectively.

Regarding claim 3, DeTreville, Schneier et al., and Fielder et al. teach the limitations as set forth under claim 1 above. Furthermore, DeTreville teaches the security mechanism according to claim 1 wherein the immutable memory contains a private key for encrypting the user and security mechanism identification information (column 22, lines 15-25).

Regarding claim 4, DeTreville, Schneier et al., and Fielder et al. teach the limitations as set forth under claim 1 above. Furthermore, DeTreville teaches the security mechanism according to claim 1 wherein the immutable memory comprises a Read-Only Memory (ROM) (column 5, lines 16-18).

Regarding claim 6, DeTreville, Schneier et al., and Fielder et al. teach the limitations as set forth under claim 1 above. Furthermore, DeTreville teaches the security mechanism according to claim 1 wherein the persistent memory comprises at least one of one of a CMOS Random Access Memory (RAM) and a Programmable Read Only Memory (PROM) (column 5, lines 16-18).

Regarding claim 7, DeTreville, Schneier et al., and Fielder et al. teach the limitations as set forth under claim 1 above. Furthermore, Fielder et al. teach the security mechanism according to claim 1 wherein the volatile memory comprises a random access memory (column 4, lines 59-67, column 5, lines 1-4).

Regarding claim 8, DeTreville, Schneier et al., and Fielder et al. teach the limitations as set forth under claim 1 above. Furthermore, Schneier et al. teach the security mechanism according to claim 1 wherein the tamper evident enclosure readily exhibits any attempt to gain access there through to the memory elements enclosed therein (column 8, lines 15-27).

Regarding claim 9, DeTreville, Schneier et al., and Fielder et al. teach the limitations as set forth under claim 1 above. Furthermore, Schneier et al. teach the security mechanism according to claim 1 wherein the physical security of the security mechanism depends on the degree of tamper resistance of the enclosure (column 8, lines 15-27).

Regarding claim 5, DeTreville, Schneier et al., and Fielder et al. teach the limitations as set forth under claim 4 above. However, DeTreville, Schneier et al., and Fielder et al. do not disclose expressly the security mechanism according to claim 4 wherein the immutable memory further includes a Write-once ROM.

Borza teaches the security mechanism according to claim 4 wherein the immutable memory further includes a Write-once ROM (column 11, lines 10-17).

DeTreville, Schneier et al., Fielder et al., and Borza are analogous art because they are directed to a similar problem solving area – authentication systems and data protection.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use write-once read only memory to prevent software from being overwritten.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Borza with the method of DeTreville, Schneier et al., and Fielder et al. for the benefit of authentication systems and data protection to obtain the invention as specified in claim 5.

Regarding claim 10, DeTreville teaches a method for facilitating a secure connection session with a user between a network peripheral device and a network (column 4, lines 18-22), comprising the steps of: accessing an immutable memory element that contains first information that provides security services (column 4, lines 35-40); accessing a persistent memory element that contains second information including configuration information to enable the security mechanism to configure the network peripheral device to the network (column 5, lines 15-20); accessing a volatile memory element that contains third information, including critical data for authentication (column 5, lines 18-24). However, DeTreville does not disclose expressly a method for facilitating a secure connection session with a user between a network peripheral device and a network, comprising the steps of: erasing said third information not later than the end of the connection session so no third information remains in the volatile memory between sessions.

Fielder et al. teach a method for facilitating a secure connection session with a user between a network peripheral device and a network, comprising the

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steps of: erasing said third information not later than the end of the connection session so no third information remains in the volatile memory between sessions (column 4, lines 59-67, column 5, lines 1-4).

DeTreville and Fielder et al. are analogous art because they are directed to a similar problem solving area – authentication systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to store critical data for authentication on volatile memory to avoid misappropriation.

Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Fielder et al. with the method of DeTreville for the benefit of authentication systems to obtain the invention as specified in claim 10.

Regarding claim 11, DeTreville and Fielder et al. teach the limitations as set forth under claim 10 above. Furthermore, DeTreville teaches the method according to claim 10 wherein the security services include authentication of the security mechanism itself (column 4, lines 35-38) and authentication of the user to the network upon receipt of identification information from the security mechanism and the user (column 23, lines 4-14), respectively.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571) 272-5861. The examiner can normally be reached on Monday-Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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